

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-2 in direct ELISAs. Does not cross-react with recombinant IL-2 from mouse, rat, pig, or cotton rat.
Source	Monoclonal Mouse IgG ₁ Clone # 5334
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human IL-2 Ala21-Thr153 Accession # NP_000577
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	See Below
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ cells	Human peripheral blood mononuclear cells treated with PMA and Ca ²⁺ ionomycin, fixed with paraformaldehyde, and permeabilized with saponin
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	
Neutralization	Measured by its ability to neutralize IL-2-induced proliferation in the CTLL-2 mouse cytotoxic T cell line. Gearing, A.J.H. and C.B. Bird (1987) in <i>Lymphokines and Interferons, A Practical Approach</i> . Clemens, M.J. et al. (eds): IRL Press. 276. The Neutralization Dose (ND ₅₀) is typically 0.015-0.03 µg/mL in the presence of 2 ng/mL Recombinant Human IL-2.	

DATA

Neutralization

Cell Proliferation Induced by IL-2 and Neutralization by Human IL-2 Antibody. Recombinant Human IL-2 (Catalog # 202-IL) stimulates proliferation in the CTLL-2 mouse cytotoxic T cell line in a dose-dependent manner (orange line). Proliferation elicited by Recombinant Human IL-2 (2 ng/mL) is neutralized (green line) by increasing concentrations of Mouse Anti-Human IL-2 Monoclonal Antibody (Catalog # MAB202). The ND₅₀ is typically 0.015-0.03 µg/mL.

Immunocytochemistry

IL-2 in Human PBMCs. IL-2 was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) treated with calcium ionomycin and PMA using Mouse Anti-Human IL-2 Monoclonal Antibody (Catalog # MAB202) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Interleukin 2 (IL-2) is a cytokine that stimulates the growth and differentiation of B cells, T cells, NK cells, and monocyte/macrophages. It functions through the heterotrimeric IL-2 receptor comprising α, β, and γ chains.